

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F.	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/844,537	09/844,537 04/27/2001		Robert W. Baxter	9266-2	9266-2 3743	
20792	7590 02/26/2004 EXAMINER				INER	
		BLEY & SAJOV	CORRIELUS, JEAN M			
PO BOX 37428 RALEIGH, NC 27627				ART UNIT	PAPER NUMBER	
ŕ				2172	10	
			DATE MAILED: 02/26/2004			

Please find below and/or attached an Office communication concerning this application or proceeding.

	The state of the s						
•	Application No.	Applicant(s)					
Office Action Summan	09/844,537	BAXTER ET AL.					
Office Action Summary	Examiner	Art Unit					
	Jean M Corrielus	2172					
The MAILING DATE of this communication app Period for Reply	ears on the cov r sheet with the c	correspondenc address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply of 16 NO period for reply is specified above, the maximum statutory period who is a failure to reply within the set or extended period for reply will, by statute, any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 09 Fe	ebruary 2004.						
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1-33</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	· <u> </u>						
	Claim(s) <u>1-5,12-16 and 23-27</u> is/are rejected.						
7) Claim(s) 6-11,17-22 and 28-33 is/are objected 8) Claim(s) are subject to restriction and/or	,						
o) Claim(s) are subject to restriction and/or	r election requirement.						
Application Papers							
9) The specification is objected to by the Examine							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the	-	` '					
Replacement drawing sheet(s) including the correcting 11) The oath or declaration is objected to by the Ex		•					
The bath of declaration is objected to by the Ex	animer. Note the attached Office	Action of form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).					
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the prior	ity documents have been receive	ed in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list	of the certified copies not receive	d.					
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
2) Dotice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Other:	atent Application (PTO-152)					

Serial Number: 09/844,537: Page 1

Art Unit: 2172:

DETAILED ACTION

1. This office action is in response to the request for continued examination filed on February 9, 2004, in which claims 1-33 are presented for further examination.

Response to Arguments

2. Applicant's arguments filed February 9, 2004 (paper no.9) have been fully considered but they are not persuasive

Claim Rejections - 35 U.S.C. '103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-5, 12-16 and, 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eidson US Patent no. 5,923,557.

As to claims 1, Eidson discloses the claimed limitations "storing a command for the controller in a database, wherein the command is selected from a group of commands consisting of a write command that is configured to write a value of a real-time process control variable to the controller and read command that is configured to read a value of a real time process control variable from the controller" as the means wherein the information in the database includes a set of device specific information for each of the process control devices detected by the mapping

Serial Number: 09/844,537:

Art Unit: 2172:

processor, wherein the device specific information for a particular process control device includes information such as the number of variables associated with the process control device, the triggering requirement, wherein in general, each variable associated with a process control device maps to a channel (col.4, lines 55-65). Eidson does not explicitly disclose the use of detecting the stored command in the database. Eidson, however discloses the use of obtaining a set of information pertaining to the process control wherein the information described the process control according to the predetermined device oriented protocol that corresponds to the standard interface (col.2, lines 55-62; col.4, lines 28-40 and 55-65). Eidson discloses also the use of "sending the detected command to the controller" as a way of passing the information to the mapping processor which writes it into the database (col.6, lines 3-32). Therefore, it would have been obvious to one of ordinary skill in the art of data processing, at the time the present invention was made to modify the teachings of Eidson, wherein the process control system, provided therein (See Edison's fig.3) would incorporate the use of detecting the stored command in the database, as the same conventional manner of detecting the device connected to the field bus depends on the predetermined protocol of the field bus, as disclosed by Eidson (col.2, lines 55-62; col.4, lines 28-40 and 55-65). Such modification would provide Edison's system the enhanced computing ability for enabling the application controller to communicate with the process control, thereby controlling the correspondence process control, decreasing the difficulty and cost of maintaining the process control system, securing information delivery, thereby authorizing locations, and tracking and updating the status the information data.

Page 2

Serial Number: 09/844,537:

Art Unit: 2172:

As to claims 2, Eidson discloses the claimed limitation "verifying that the stored command is a

valid command for the controller" as obtaining information such as the triggering requirement

(col.5, lines 22-29).

As to claims 3, Eidson discloses the claimed limitations "sending a write command that is

configured to write a first value of a first real-time process control variable to the controller" by

writing the interface specific configuration information in the device oriented interface database

with appropriate values (col.5, lines 15-20); and "sending a read command that is configured to

write a first value of a first real-time process control variable to the controller responsive to

sending the write command that is configured to write the first value of the first real time process

control variable to the controller" as reading the device specific information from the device

dictionary and writing it to appropriate entries in the device oriented interface database (col.5,

lines 43-47).

As to claims 4, Eidson discloses the claimed limitations "receiving a response from the controller

responsive to sending the retrieved command to the controller" (col.6, lines 1-7); and "updating a

status of the retrieved command sent to the controller in a command table in the database to

indicate whether the retrieved command sent to the controller succeeded or failed" as updating

Page 3

Serial Number: 09/844,537:

Art Unit: 2172:

the dictionary server attached to field bus as new process control device become available or

Page 4

modified in term of device specific information (col.5, lines 61-64).

As to claims 5, Eidson discloses the claimed limitation "updating the current value associated

with the first real time process control variable in a tag in the table in the database with the first

real time process control variable read from the controller responsive to receiving the response

from the controller" as updating the dictionary server attached to field bus as new process control

device become available or modified in term of device specific information (col.5, lines 61-64).

As to claims 12-16:

Claims 12-16 are for system claims performing the methods of claims 1-5. They are similarly

rejected.

As to claims 23-27

Claims 23-27 are for computer readable medium containing instructions performed by the

methods of claims 1-5. They are similarly rejected.

Allowable Subject Matter

Serial Number: 09/844,537: Page 5

Art Unit: 2172:

5. Claims 6-11, 17-22 and 28-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reason for Indicating Allowable Subject Matter

6. The present application has been thoroughly reviewed. Upon extensive and exhaustive searches of various databases (see search notes in case jacket), the examiner respectfully submits that the claimed feature --providing a tag table in the database that comprises definitions of a plurality of real time process control variables, wherein each of the plurality of real time process control variables is associated with a monitoring frequency and a current value; periodically sending a read command that is configured to read a value of a real-time process control variable for respective ones of the plurality of real time process control variables from the controller based on the respective monitoring frequencies; and updating the respective current values for respective ones of the plurality of real time process control variables with the respective values of the real time process control variables read from the controller-- in the method, system and computer program of claims 6, 17 and 28 respectively and in conjunction with all other limitations of the dependent and independent claims would not found anticipated or obvious over the prior art made of record.

Art Unit: 2172

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (703)306-3035. The examiner can normally be reached on Tuesday - Friday (7:30 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703)305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jean M. Corrielus

Patent Examiner

February 25, 2004